

# ST-3® THREAD SEALANT

ST-3 is a pre-applied process whereby a series of resilient thread sealants are coated onto straight or tapered threaded fasteners. A widely-used automotive industry approved process, ST-3 creates a custom-fit elastic gasket around fastener threads which prevents the passage of most fuels and chemicals, and helps keep joints tight under severe vibration.



## PRE-APPLIED PROCESS INFORMATION

#### How It Works

During the ST-3 pre-application process, ND Industries accurately dispenses a select range of materials onto fasteners, making them self-sealing. The applied sealants act as a partial lubricant, reducing torque tension variation and preventing the galling of metals. They will not harden or cure, allowing fasteners to be adjusted, removed, and replaced, throughout the life of the part if needed. Processed fasteners arrive to the customer dry to the touch, and ready for immediate assembly.



ST-3 creates fasteners which provide an instant seal of over 2000 psi on both straight and tapered threads.



Materials used in the ST-3 process are non-hazardous, non-flammable, and will not migrate into fluid systems like paste or tape sealants.



The materials applied through the ST-3 process are non-hardening with lubricating properties, making fasteners easy to adjust, remove, and reuse.



Sealants applied in ST-3 processing are resistant to corrosion from brine, chlorine, acids, and alkalis. They effectively resist natural gas, butane, propane, motor fluids, and other chemicals.



Although ST-3 processed fasteners are primarily for sealing, they also provide a limited amount of resistance to vibrational loosening and thermal shock resistance through a wide range of temperatures.



ST-3 processing inhibits corrosion between mating fasteners which prevents seizing and allows for easy removal.

### CONTACT US

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#### **PRE-APPLIED BENEFITS**

**Saves Time:** Pre-Applied ST-3 fasteners can be automatically fed through standard feeding devices – speeding up your process and improving productivity.

**Saves Money:** Pre-Applied ST-3 processing is less expensive than hand applying bottled thread sealing compounds or tapes at the point of assembly.

Quality Control: Pre-Applied ST-3 fasteners are coated to specification, ensuring consistent performance, unlike the variation from hand applying bottled products.

**Reliability:** Under most operating conditions, Pre-Applied ST-3 fasteners are unaffected by vibration or reversal of stress and greatly reduce the need to re-tighten fasteners.

#### **ST-3 APPLICATIONS**

Pipe Plugs, Engine Applications, Head Gasket Application, Under Head Sealant for Torque Tension control, Automotive Hose Fittings, Cooling System, A/C System.

### **APPROVED SPECIFICATIONS**

Meets or exceeds the performance requirements of the following specifications and/or standards:

- Chrysler: MS-CD16
- Ford: WSK-M4G328-A1 A2 A3 A5 A6, ES-379570-S100, WX-201, WSS-M18P12-A
- General Motors: 9985490, 9985473
- Volvo: 1262.2

#### **PROCESSING NOTES**

- For the ST-3 process, sealants are typically applied one to three threads back from the end of a fastener to assure ease of starting.
- Indefinite on part life under ideal storage conditions [+40°F (+4°C) to +90°F (+32°C)], but recertification must occur once a year.

### **PRE-APPLIED SERVICE**

**Step 1 - Process Selection:** Our sales and R&D staff will help you find the right process to meet your performance specifications.

**Step 2 - Shipping:** Once a selection has been made, have your fasteners shipped to one of our worldwide processing centers.

Step 3 - Processing: Utilizing custom, high-speed equipment, we apply the necessary materials to your exact specification.

**Step 4 - Delivery:** Once processing is complete, parts are shipped back ready for distribution or assembly.